Do the Principles Help the Practice? Evaluating the Governance Principles Supporting (or Undermining) Climate Finance

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Abstract

Industrialized countries have committed to providing "new and additional" funding to developing countries for climate change mitigation and adaptation. However, lack of a common definition of "new and additional" undermines the climate process. This article aims to contribute to the discussion on the principle of additionality by assessing possible definitions. The article first contextualizes the guiding principles that led to the endorsement of "new and additional" finance within the history of international climate negotiations. Second, we survey definitions of "new and additional" put forward by industrialized countries as well as further proposed definitions put forward by scholars. Third, we assess the respective strengths and weaknesses of these definitions.

Our analysis shows that there is no singular formula that would resolve the problem of how to define additionality. Definitions that would be politically acceptable to developed countries are subject to gaming while definitions that are technically robust are politically difficult. We conclude that a combination of using innovative sources and defining specific future levels of development assistance ex ante may offer the best prospects for resolving the climate finance conundrum.

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Introduction: Why developing countries expect finance for climate compatible development

Climate finance is a lynchpin in the climate regime and a pervasive component in all climate negotiations. Baer et al. describe the potential pathways to address climate change, "In the absence of a true technological miracle, we see only three possibilities: the climate regime severely limits the growth in energy use of the world's poor; the rich pay to subsidize low-carbon development globally; or we abandon the possibility of …stabilizing the climate" (Baer et al. 2008). Given that abandonment is not a choice for human or environmental ecologies and developing countries will hardly find it agreeable to curtail their development aspirations, finance to the developing world is crucial.

Since the beginning of the climate negotiations, developing countries have fought to include a transfer of financial resources from industrialized countries to facilitate mitigation and adaptation efforts. Diplomatic efforts have led to internationally endorsed declarations, agendas and conventions governing climate change that reflect the developing countries' history and current needs. This has created both the concept of "common but differentiated" responsibility and placed industrialized nations in a leadership role in the climate regime.

Article 4 of the UNFCCC and Article 11 of the Kyoto Protocol both mandate industrialized countries to provide "new and additional" financial resources to developing countries to support capacity-building, development and transfer of technologies, mitigation of greenhouse gas (GHG) emissions, adaptation to the impacts of climate change, and economic diversification. In addition, Art. 4.7 of the Convention expressly notes that,

> "The extent to which developing country Parties will effectively implement their commitments under the Convention will depend on the effective implementation by developed country Parties of their commitments under the Convention related to financial resources and transfer of technology and will take fully into account that economic and social development and poverty eradication are the first and overriding priorities of the developing country Parties."

The need for a commitment to a significant transfer of finances is mainly due to two factors. First, about 70% of the anthropogenic greenhouse gases (GHGs) since 1950 come from developed countries (Stern 2009). This percentage becomes significantly higher if one calculates the historical burden from the industrial revolution. Secondly, the costs of climate change will probably be beyond the financial capacity of many developing nations. In 2009, the Expert Group on Technology Transfer under the United Nations Framework Convention on Climate Change (UNFCCC) estimated climate change mitigation would require an additional investment of annually US$105-402 billion for developing countries (UNFCCC 2009a). The UN Department of Economic and Social Affairs (UNDESA) estimates that between 2000 and 2050 developing countries will require approximately US$1.1 trillion in additional annual energy supply and energy end-use investments as compared to a business as usual (BAU) scenario (UNDESA 2011). The estimates of the cost of adaptation for developing countries for 2030 vary from US$80-90 billion to US$134-230 billion per year (Parry et al. 2009; UNDP 2007; World Bank 2010).

Despite the UNFCCC commitments made 20 years ago, climate finance has not been forthcoming in amounts corresponding to the estimated finance needs as outlined above. The 2010 World Development Report estimates the annual climate finance made available over the period 2008-2012 at roughly US$10 billion annually (World Bank 2010). At the 15th Conference of the Parties (COP) of the UNFCCC, industrialized countries once again pledged to address the gap, committing to "mobilize" US$100 billion per year by 2020 "from a wide variety of sources, public and private, bilateral and multilateral, including alternative sources" (UNFCCC

2009). In return, developing countries agreed to make their own voluntary pledges towards reductions in greenhouse gas emissions. This was a softening of their initial interpretation of "differentiated treatment" whereby developing countries were not at all obliged to reduce emissions. In order to make the promise credible, industrialized countries also pledged "fast start finance" approaching US$30 billion of "new and additional resources" between 2010-2012 (UNFCCC 2009).

Meeting the fast start finance commitment is essential to reestablish trust in the climate negotiation process. The process has been battered over the past twenty years by the failure of the United States to sign onto the Kyoto Protocol's first commitment period (Boehmer-Christiansen and Kellow 2002), the failure of the international community as a whole to commit to a legally binding post-2012 regime (Carraro and Massetti 2012). More recently the refusal of Japan, New Zealand and Russia participate in the Kyoto Protocol's second commitment period, and Canada's decision to withdraw entirely have further undermined the international climate regime.

However, lack of a common definition of "new and additional" undermines the trust building process. The demand by developing countries is that increased climate finance should not come at the expense of other funding for other development objectives, such as health or education. Developing countries argue that finance must go above and beyond the long-established official development assistance (ODA) target of 0.7% of industrialized country GDP in order to qualify as "new and additional" (see e.g. African Climate Policy Centre (2011)). This target was first agreed upon at the UN General Assembly in 1970 (UN 1970, paragraph 43) and has been repeatedly reaffirmed. Industrialized countries have never accepted this interpretation of additionality and have established individualized baselines to

demonstrate that aid has not been diverted from previous commitments. The result is a situation whereby developing countries accuse industrialized countries of failing to fulfil their commitments while the latter maintain that they are keeping their promise. As long as there is no objective benchmark for additionality, the debate will continue to deteriorate good will between the parties.

This article aims to contribute to the discussion on the principle of additionality in climate finance. The article will first contextualize the guiding principles that led to the endorsement of "new and additional" finance within the history of international climate negotiations. Second, we will survey the definitions of "new and additional" put forward by industrialized countries. Third, we assess existing justifications for the achievement of additionality, both in practice and in theory.

Our analysis shows that there is no singular formula that would resolve the problem of how to define additionality. Definitions that would be politically acceptable to developed countries are subject to gaming while definitions that are technically robust are politically difficult. Use of innovative sources such as auctioning of emission allowances may offer the best prospects for resolving the climate finance conundrum. In addition to being "new" by definition, funding from innovative sources has the added advantage of enabling climate finance to scale up without drawing on countries' general budgets. Nevertheless, drawing from innovative sources alone is not a sufficient condition for additionality -- while the funding stream would be novel, it would not necessarily be additional to previous funding levels. Ideally, new sources should therefore be combined with a commitment to pre-defined ODA levels. At a minimum, donor countries should commit to at least stabilize non-climate-related development funding at current

levels. However, even this rather unambitious baseline would require a substantial strengthening of the current ODA accounting system.

Historical Context: Additionality in Principle

While the Copenhagen Accord is novel in that it specified that "new and additional" resources for developing countries should approach 30 billion USD in 2010-2012 and be scaled up to 100 billion USD annually by 2020, political commitment to provide developing countries with new streams of financial resources has been emphasized and reiterated since it first appeared in the preamble of Agenda 21 in Rio de Janeiro in 1992 (UNDESA 1992).

Consensus that climate finance should not compete with regular flows of Official Development Assistance was also reaffirmed in the Kyoto Protocol, Article 11.2 (UNFCCC 1997) as well as the Montreal Protocol, Decision 11/8 (UNEP 2000), the Bonn Declaration (UNFCCC 2001), the Marrakesh Accords Art J.29 (UNFCCC 2002), and the Bali Action Plan, Decision 1/CP.13 (UNFCCC 2008). Thus, the original call for "new and additional" funds for developing countries remains operative (emphasis added):

> 1.4. The developmental and environmental objectives of Agenda 21 will require a substantial flow of ***new and additional*** financial resources to developing countries, in order to cover the incremental costs for the actions they have to undertake to deal with global environmental problems and to accelerate sustainable development (UNDESA 1992).

This citation, and the aforementioned, evidence that additionality has always been a bedrock principle of the international climate regime. The concept has been consistently asserted by developing nations, reflecting fear that funding will be diverted from traditional development funding to environmental concerns.

However, repeated assertion does not bear on the clarity of the definition nor the efficacy of its implementation. Guidance to the donor countries on their climate finance obligations is both specific in intent and vague in operation. We have added emphasis in bold on the text to highlight the clarity of the financial goals agreed upon at the 16th COP yet note the absence of operational guidelines for their fulfillment.

> 95. [COP 16] *Takes note* of the collective commitment by developed countries to provide **new and additional resources**, including forestry and investments through international institutions, **approaching USD 30 billion for the period 2010–2012**, **with a balanced allocation between adaptation and mitigation;** funding for adaptation will be prioritized for the most vulnerable developing countries, such as the least developed countries, small island developing States and Africa;
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> 96. *Invites*, in order to enhance transparency, developed country Parties to submit to the secretariat for compilation into an information document, by May 2011, 2012 and 2013, information on the resources provided to fulfill the commitment referred to in paragraph 95 above, **including ways in which developing country Parties access these resources;**
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> 97. *Decides* that, in accordance with the relevant provisions of the Convention, **scaled- up, new and additional, predictable and adequate funding shall be provided to developing country Parties**, taking into account the urgent and immediate needs of developing countries that are particularly vulnerable to the adverse effects of climate change. (UNFCCC 2010).

The widespread adoption of the additionality concept, at least in language, can be compared to the term "sustainable development" which has also enjoyed endorsement across the spectrum of developing and developed economies. Critics of sustainable development point to its political durability as a "term of consensus," i.e. a term that all parties can endorse because it encompasses a wide spectrum of implementation possibilities (Daly 1990; Rydin and Baker 1997). Put simply, political terms of consensus gain strength within international discourses precisely because they have so little strength in implementability (Lele 1991).

Thus it is not surprising that the principle of additionality is publically endorsed and privately contested; the following section digs deeper into additionality in action – how do developed countries apply the principle to their own donor strategies for the less developed?

Fast Start Finance: An Empirical Survey of the Pledges to Date

Twenty-six industrialized countries and the European Commission have published information on their fast start pledges and how they are implementing them. Most countries' pledges, along with project information, were initially posted on the website: www.faststartfinance.org.[1] The initiative was started by the Netherland's government to increase transparency of reporting on the amount, direction and use of fast start finance funds (Anon. 2012). However, documents from the donor nations range from brochures touting their national aid organizations to excel sheets with undefined criteria and vaguely defined plans. To enhance the quality of reporting, COP 16 invited developed country Parties to submit information on their FSF to the secretariat by May 2011, 2012 and 2013. COP 16 also requested the UNFCCC Secretariat to compile the information from the submissions in one document (UNFCCC 2010). The submissions and compilation documents are made available on the UNFCCC website.[2] However, the EU provides one submission for all of its countries and does not address the question of additionality. The examination of EU countries therefore needs to rely on the information provided on faststartfinance.org, which for most countries has not been updated since 2011. We summarize the justifications countries have put forward for why their climate funding is new and additional in Table 3 annexed to this paper.

Several countries do not give any justification why their funding is "new and additional". Others do not have a stated baseline and merely mention that the funding is additional to previous commitments. Australia's fast start finance does not explicitly mention additionality as the report states, "Funding draws from a growing

[1] Austria, Ireland, Italy, and New Zealand are exceptions and are not listed on the website.

[2] http://unfccc.int/cooperation_support/financial_mechanism/fast_start_finance/items/5646.php.

aid budget. It does not displace funding from existing aid programs" (Australian Government 2010a). The same applies to Iceland, New Zealand, and the United Kingdom. Denmark, Luxembourg, the Netherlands, Norway, and Sweden all highlight that they have exceeded the UN goal of giving 0.7% of GDP/GNI as ODA. While Denmark states that anything above .7% of GDP/GNI is considered additional, Luxembourg, the Netherlands, Norway and Sweden note that their climate funding goes even beyond the ODA levels they previously provided.

Baselines might also be set in time, which is the approach used by most donors: Belgium, Canada, European Commission, Finland, France, Liechtenstein, Spain, Switzerland, and the United States. Germany also uses Copenhagen as a baseline and considers any funds from auctioning emissions certificates as new since they are from a new financing stream.

The listing of the individual projects that are being funded demonstrates the ways in which traditional development aid is being funneled through fast start finance, underscoring the myriad interpretations of "new and additional." While each definition is justifiable on its own grounds, the overall heterogeneity of reporting methods renders it quite difficult for developing countries to predict or plan for incoming funds. Canada is counting $7 million of its fast start financing to the world food program in Ethiopia (Canada 2010). All of Malta's mitigation funding (83% of total committed) is going to the Global Alliance for Clean Cookstoves. Many countries are counting their contribution to the fifth round of the Global Environmental Facility as a component in their fast-start financing package while others are explicitly not.

Some observers assume that most of the fast start finance is actually relabeled Official Development Assistance. For example, a recent Oxfam report has found that

only 152 million euros of Germany's pledge of 1.26 billion euros is new and the remaining amount was committed earlier (Kowalzig 2011).

Principle Becomes practice: Justifications of Additionality

Previous scholarship has usefully categorized the varying methods that donor countries have employed to justify additionality, while evaluating such approaches according to principles of fairness, transparency, effectiveness and other scoring principles (Fallasch and De Marez 2010; Stadelmann, Roberts, and Michaelowa 2010; IIED 2011; Knoke and Duwe 2012). The following section synthesizes past work on defining the baseline as evidenced in faststartfinance.org and countries' submissions to the Secretariat. Table 2 summarizes the definitions of additionality put forward by Parties and scholars and which Party is using which definition.

	Method	**Utilization**
1	*New and additional is undefined; pledges are simply made*	Austria, Ireland, Italy, Japan, Malta, Portugal, Slovenia
2	*Funds shall exceed .7% of GNI, the agreed UN target for ODA as agreed in 1970 and reiterated in Rio, 1992.*	Denmark, Luxembourg, Netherlands, Norway, Sweden
3	*Baselines set to annual deadlines, i.e.; funds must be additional to those promised before COP 15; the Bali Action Plan, the prior year, etc*	Belgium, Canada, European Commission, Finland, France, Liechtenstein, Spain, Switzerland, United States, Germany, Norway, Sweden
4	*New and Additional climate finance streams must be derived from novel sources.*	Germany
5	*Funds come from rising overall ODA levels*	Australia, Iceland, New Zealand, United Kingdom
6	*Funds must be additional to projected ODA levels.*	None
7	*Funds must be additional to pre-defined ODA levels.*	None
8	*No ODA allowed*	None

Table 1: Justifications of Additionality

1) New and Additional is undefined, there is no baseline. As shown, several countries have made pledges without any kind of justification why they should be deemed new and additional.

2) *Funds shall exceed .7% of GNI, the agreed UN target for ODA as agreed in 1970 and reiterated in Rio, 1992*. As noted above, this is the demand that has been made by developing countries. While the clarity of this baseline is certainly appealing, only the Netherlands, Luxembourg, Denmark, Norway, and Sweden would qualify. The .7% of GNI for ODA calculation is somewhat arbitrary and has not managed to catalyze political commitments in the forty years since the figure was articulated at the UN General Assembly in 1970 (DAC 2010). The difficulty of reaching this baseline may discourage donor countries whose current levels of giving are far below the target, while ODA levels themselves are highly volatile and therefore complications may arise in securing long-term, predictable climate finance for developing countries. In addition, as Stadelmann, Roberts and Michaelowa (2010) note, even in those countries that are already meeting the 0.7% commitment the issue is not straightforward. For example, Denmark increased its climate funding while at the same time freezing the overall ODA budget, so the increase in climate finance is probably at the expense of other funding.

3) *Baselines set to annual deadlines, i.e.; funds must be additional to those promised before COP 15; the Bali Action Plan, the prior year, etc.* Time-based proposals, generally justified according to landmark moments in climate policy such as the fast start finance promise in Copenhagen or the World Bank's establishment of the Climate Investment Funds after Bali, offer clarity and are easy to track but lack credibility. Baselines derived from landmark years punish first movers who may have made their pledges before the baseline year. Should the baseline be too far in the

past, the argument that the funds are "new and additional" is further compromised. In addition, ODA has increased in the past and should increase further to meet the 0.7% target. Increasing funding does therefore not per se constitute an effort that is additional to what countries have anyway pledged to do in order to meet development goals. In fact, as this definition makes no reference to ODA, there is no guarantee that increased climate funding does not come at the expense of other development purposes (Knoke and Duwe 2012).

4) *New and Additional climate finance streams must be derived from novel sources.* The introduction of new public finance instruments, most likely linked to pricing carbon, was a central suggestion of the UN Secretary General's High Level Advisory Group on Climate Change Finance (United Nations 2010). As these are or would be completely new sources, the funding from these sources would by definition be new and additional. However, this approach does not distinguish between old and new commitments. Finance predictability may also be compromised as financial flows would depend on carbon prices, which have been fluctuating substantially. On the other hand, international mechanisms for international sectors, such as international levies or emissions trading for international aviation and shipping, might actually be more predictable than "traditional" climate finance from national budgets as such international budgets would not be at the whim of national governments. Still, the degree of planning, experimentation and possible failure associated with innovation renders this baseline more feasible as a complementary approach as opposed to an exclusive definition of "new and additional.

5) *Funds come from rising overall ODA levels*. Several countries (Australia, Iceland, New Zealand, United Kingdom) argue that their increase of climate finance is coming from increasing ODA. This option has the advantage of explicitly allowing to count

climate finance as part of ODA, avoiding a potentially artificial separation. To prevent diversion of ODA, the increase of overall ODA levels would need to be at least as high as the increase of climate finance. ODA diversion would still be possible but less likely.

6) *Funds must be additional to projected ODA levels*. In this approach climate finance would be measured against projected development assistance. Projections would be updated regularly taking into account for example economic growth and development aid commitments. While this approach is easy to define in theory, in practice it would be very difficult to project what future ODA levels are going to be. Especially as industrialized countries would have an incentive to game the system.

7) *Funds must be additional to pre-defined ODA levels*. This approach would avoid the problem of the previous option by having industrialized countries agree to a specific future ODA trajectory ex ante. While industrialized countries would probably be reluctant to agree to specific yearly ODA levels in advance, this is one of the technically most feasible options.

8) *No ODA allowed*. This final option for baseline calculation is on the surface the most straightforward: donors could count funding towards climate or towards ODA but not towards both as is currently the case. Most industrialized countries reject this option as they prefer to count their climate finance towards their ODA targets and argue that climate change should be mainstreamed into development assistance (Stadelmann, Robbins and Michaelowa 2010). Yet perhaps more insidiously, a "no ODA" baseline might bring about perverse policy implications in that climate finance would be artificially separate and excluded from development projects that could be easily "greened". A softer version of this approach was proposed by former UK prime

minister Gordon Brown, who suggested that climate finance should be allowed to be counted as ODA up to 10% of a country's total ODA. According to Brown (2009),

> "Assistance for climate change should not be allowed to divert money from the pledges we have already made to the poorest… At the same time, we must also recognise that some aspects of low carbon and climate resilient investments will also be critical for poverty reduction… So I propose that, while some climate finance can come from official development assistance - where it clearly meets both poverty reduction and adaptation or mitigation objectives - a ceiling should be placed on this."

Thus, while the call for new and additional funds has been reiterated since the 1992 UNCED Summit, and enjoys a near global consensus from the international community, an empirical examination of the practice of additionality reveals highly varied reporting methods and a lack of transparency to achieve the tangible climate regime commitment that the fast start finance pledges were designed to achieve.

The Problem of Counterfactual Baselines

The central challenge with identifying additional finance is that it must go credibly beyond regular aid; thus defining a pledge as "additional" entails a counterfactual claim as to what would have been without the climate regime. Building a global effort on a counterfactual scenario is dubious at best, opportunities for gaming the system are rampant.

Coordinated international agreements face heavy cooperation and trust barriers in the best of circumstances (Barrett 1999) and thus the counterfactual nature of many additionality claims renders both authentically additional and also misleading claims for additionality suspect. It follows that additionality is rife with perverse incentives, as is the case with any rewards system based on counterfactual claims. The administrative costs of verifying truth claims will be high, because counterfactual arguments are situationally based, i.e. additionality claims can only be credible when verified on a case-by-case basis or via the establishment of

standardized baselines that exceed the performance of the most ambitious strata of the donor population.

Financial stream eligibility based on counterfactual scenarios can also lead to unfair distribution patterns. From the donor perspective, there is a tension between making pledges for development assistance if such pledges raise the bar in terms of what must be offered in total for climate aid. Countries that have been historically generous, such as the Nordic states, must do more than the neighboring donor countries such as Italy and Spain in order to qualify as giving "additional funds." Similarly, the possibility for developing countries that have already been incorporating climate-compatibility within their use of official development aid to be excluded from the "additional" pool of funds would be counterproductive, and efforts to remedy this perversion through accounting[3] mechanisms would only add more red tape to their work. By artificially separating climate and development financial streams, climate finance is structured to actually hinder the realization of its highest objective, that of promoting climate compatible development.

Knoke and Duwe (2012) point out that there are in fact substantial overlaps between development assistance and climate finance. On the adaptation side, "While many impacts of climate change (sea-level rise, more extreme weather phenomena) are noticeable throughout the world, it is the combination of low capacity, high levels of poverty and weak institutions of those countries that make them so vulnerable. All these areas are specific objectives of development cooperation. At the same time, some sectors that are particularly relevant with regard to food security and poverty

[3] For example, perverse incentives in demonstrating additionality undermined the Clean Development Mechanism. The Least Developed Country of Nepal has historically relied on a clean hydro-electric power, but its electric grid is insufficient for current consumption needs and daily power outages are the norm. New hydropower plants were nevertheless ineligible for CDM finance, while hydroplants in the more economically advanced (and more coal-intensive) China, were eligible (Dhakal and Raut 2010; Haya and Parekh 2011).

reduction, such as (smallholder) agriculture, rural livelihoods, the water or health sector, are also highly relevant to activities concerning adaptation to climate change." (Knoke and Duwe 2012: 8)

One the mitigation side, there are also substantial overlaps with traditional development assistance activities, for example in the fields of energy access, waste management or forestry. Deciding where development finance ends and climate finance starts is therefore difficult, there is no clear-cut dividing line from which "new and additional" funding starts.

Using Baselines That Are Not Counterfactual

However, Knoke and Duwe (2012) also point out that while activities may often be indistinguishable, a climate focus may lead to substantial shifts of the sectoral and geographical distribution of funding. In terms of mitigation, for example, the vast majority of funding will be required in the rapidly industrializing countries rather than poorer countries. Merging climate and development finance may therefore not only lead to a shift away from traditional development priorities but also a shift away from poor countries. Mitigation funding is in fact heavily concentrated. China accounts for no less than 50% of all CDM projects while LDCs have so far been mostly bypassed by the mechanism (UNFCCC 2013).

A further argument is that adaptation and mitigation in developing countries may be referred to as development under deteriorating framework conditions. The impacts of climate change and the necessities to adapt to these impacts and to reduce emissions impose additional costs on developing countries, which they would not incur in the absence of climate change. Correspondingly, financial support provided

to developing countries should also be higher than the funding that would be provided in the absence of climate change.

To credibly implement this principle, only definitions of "new and additional" should be used that are not based on counterfactual claims and are not subject to gaming. The above analysis has identified two baseline approaches that are based on objective facts that can be determined ex ante rather than on counterfactual claims of what might have happened in the future. First, funds from innovative sources of finance such as proceeds from auctioning emission allowances or financial transaction taxes would be funding from completely new sources and hence by definition be new. This approach would be very straightforward to verify. Second, requiring funds to be additional to pre-defined ODA levels solves the problem of "what if?" by fixing future ODA levels ex ante. While politically difficult, this approach would also be very straightforward to verify. The following discusses these two approaches in more detail.

The Potential of Innovative Sources

In addition to being "new" by definition, funding from innovative sources also has the added advantage of allowing to scale up climate finance without drawing on national budgets. According to analysis by the AGF, the revenue potential from these sources is substantial. Table 3 below summarizes the public revenues that according to the AGF could be derived from auctioning of emissions allowances in industrialized countries, levies on offsets and putting a carbon price and international shipping and aviation.

Public Sources	Revenue Potential (billion US$)		
CO_2 Price (US$/t CO_2-eq.)	**10-15**	**20-25**	**50**
Auctioning of allowances (2-10% of estimated auctioning revenues dedicated to international climate finance)	2-8	8-38	14-70
Levies on offsets (levy of 2-10% of offset transactions)	0-1	1-5	3-15
International maritime transport (no net incidence on developing countries, 25-50% dedicated to international climate finance)	2-6	4-9	8-19
International aviation (no net incidence on developing countries, 25-50% dedicated to international climate finance)	1-2	2-3	3-6

Table 2: Potential Public Revenues from Carbon Market-Related Sources (adapted from Sterk et al. 2011)

Looking at the AGF assessment, it is noteworthy that the underlying assumptions are rather conservative. The AGF focuses its analysis on the medium-range carbon price (US$20-25/t CO_2-eq.) that is not in line with achieving the 2°C target and it assumes that only relatively low shares of revenues from carbon markets could be dedicated to international climate finance. If one hopefully assumes that emission targets will at some point be brought in line with the 2°C target, which according to the AGF would lead to a carbon price of about US$50, and that revenues from international sources, in particular carbon-related sources in international transport, could be fully dedicated to climate finance, mobilizing US$100 billion does in fact appear as eminently viable. International aviation and shipping alone could provide as much as half of this amount and only a relatively minor share of 7% of the revenues of auctioning allowances in industrialized countries would be needed for the other half (Sterk et al. 2011).

On the downside, while funding from innovative sources would be new, it might be offset by a decrease in development funding from national budgets and hence not be additional to previous funding levels. In order for innovative sources to

fulfill the additionality criterion, non-climate ODA levels would therefore at least need to be stabilized at current levels.

Stabilizing Non-Climate ODA at Current Levels

The question then is whether there is good enough data to establish an exact baseline for non-climate ODA and whether it is possible to accurately relate current aid flows to this baseline. To find an answer to these questions it is necessary to look at the ODA reporting system under the OECD's Development Assistance Committee (DAC).

The OECD provides development aid data in the "International Development Statistics", which consists of two comprehensive online-databases: the DAC annual aggregates database and the Creditor Reporting System (CRS). Both databases provide detailed information about the origin of aid, type, sectors, donors, recipients and more (OECD 2012a).

The so-called Rio Markers are statistical codes referring to the objectives of the Rio Conventions. Each donor country reports, screens and marks its aid activities regarding their objectives. Countries have a free hand in handling the markers since the OECD does not double-check the marking (Junghans and Harmeling 2012). As of today, there are two climate change-related markers, the climate change mitigation marker, which was established in 1998, and the climate change adaptation marker established in 2010 (OECD 2011b). When marking an activity, the parties have to classify adaptation and/or mitigation as the "principal objective", the "significant objective" or "unrelated" to climate (OECD 2011a/ OECD 2012b).

The marker system has weaknesses. The OECD admits that the precise amount of climate-change related aid cannot be identified through the marker

system as parties do not report on the basis of a shared methodology (OECD 2009; OECD 2010; OECD 2011a; OECD 2011b).[4] Furthermore a "significant objective" counts less than the full monetary value of the activity and therefore the sum of significant and principal objective expenditures should be understood as an "'estimate' or 'upper bound' of climate change related aid" (OECD 2011a: 1). Atteridge (2012) notes that donors use different values when using OECD DAC data for their reporting on climate finance: while some count only 40% of the total finance of projects where climate is a "significant" but not principal objective, others count 100% and still others make individual calculations for each project. Furthermore, activities can be marked as having both mitigation and adaptation as objective, which means that the total volume of climate-related ODA cannot be determined by simple addition of mitigation and adaptation funding (OECD 2012b/OECD 2010).

These weaknesses of the Rio marker system make it difficult to quantify the amount of non-climate ODA that should at least be stabilized in the future. Since it cannot exactly be determined what share of overall ODA was climate-related, it is correspondingly difficult to identify the non-climate-related aid funding.

Using 2009 as the baseline year to represent the situation before the 100 billion commitment was made in Copenhagen offers a simplified calculation method since only the mitigation marker had been established at that time; thus the problem of double counting adaptation and mitigation funding is eliminated. A 2009 ODA baseline could then be constituted by subtracting the funding which was marked with the mitigation marker from the overall ODA reported for 2009. As climate finance includes both adaptation and mitigation it would be preferable to use data

[4] This is being debated especially concerning the new adaptation marker because of the close connection of adaptation to traditional development aid, see e.g. Junghans/Harmeling 2012.

from 2010, after the introduction of the adaptation marker, but this would mean increasing inaccuracy because of the double counting problem.

For a well-working baseline exact and comparable data is necessary, requiring the establishment of clear definitions and reporting methodologies. The OECD reporting would therefore need become more definite and avoid double counting of funding for adaptation and mitigation. Furthermore, studies criticize that there are gray zones within the definitions of the markers which have negative effects on accuracy and comparability of coding made by the countries. For instance, a study by Michaelowa and Michaelowa (2010) regarding the coding behavior of the parties and a study by Junghans and Harmeling (2012) on the implementation of the adaptation marker show that there is a great amount of coding errors on the national side of the reporting system, especially regarding the adaptation marker. Since the OECD does not check the coding those errors persist, rendering the data vague and incomparable. Establishing a verification mechanism is therefore a further prerequisite for making the system reliable.

Conclusion

Climate finance is one of the core issues of the climate negotiations; it is a key hurdle in achieving the salient goal of reduced global emissions and adaptation to the impacts of climate change. As industrialized countries have historically been the largest emitters of GHGs and have much greater economic capacity than developing countries, they have pledged to provide “new and additional” financial resources to allow developing countries to reduce emissions and adapt to the impacts of climate change without compromising their development aspirations. The claim is that climate finance should be provided on top of general development aid rather than cannibalizing development funding for health care, sanitation, water provision etc.

However, so far the amount of climate finance that has actually been provided has been relatively modest at about US$10 billion annually and critics aver that most climate finance has actually been relabeled ODA. There is in fact no common definition of additionality, Parties are using a variety of definitions of "new and additional" and most of these definitions are problematic for various reasons. Definitions that would be politically acceptable to developed countries, such as comparison to set annual deadlines, are subject to gaming while definitions that are technically robust, such as additionality to the 0.7% target for ODA, are politically difficult.

We consider that a combination of using innovative sources and defining specific future ODA levels ex ante may offer the best prospects for resolving the climate finance conundrum. In addition to being by definition "new", funding from innovative sources also has the added advantage of allowing to scale up climate finance without drawing on countries' general budgets. The history of ODA, where most countries are still not meeting the 0.7% target they adopted four decades ago, does not make it seem likely that the future history of climate finance will be any different. Mobilizing the necessary volumes of climate finance will arguably only be possible if the climate regime is made self-financing through innovative sources connected to climate policies, such as auctioning revenues from emission trading systems or fees on international shipping and aviation.

However, increased climate finance from innovative sources may be accompanied by cutbacks in other development funding – that is, while the funding source would be new, the funding volume would not necessarily be additional to previous levels. Ideally, the use of new sources should therefore be combined with a commitment to pre-defined ODA levels. At a minimum, donor countries should

commit to at least stabilize non-climate-related development funding at current levels. Such a baseline could be established using the OECD's ODA reporting system and subtracting the amounts that have been marked for climate from the overall ODA volume. However, the Rio marker system has substantial weaknesses, including lack of common reporting standards, lack of a verification system and double counting of adaptation and mitigation finance. These deficits would need to be remedied in order to implement any kind of reliable baseline.

The need for a politically feasible and objectively credible definition of financial additionality is a necessary, but not sufficient, component of an effective international climate regime. Tensions between the clarity of a set baseline and political feasibility amongst donors with varying priorities and capacities calls for a pragmatic solution. Thus, our proposal offers both clarity and flexibility: by setting clear targets for climate finance against a pre-determined baseline, developing countries are able to rely upon a certain installation of new aid. By focusing on the capacity of innovative funding sources to meet this goal, donor countries are given the leeway they require to meet these targets in accordance with their own national goals. Further work is required on standardizing reporting procedures and delivery timelines. By clarifying the meaning of additionality all parties stand to gain, as this simple reform in the climate negotiation process would enable the issue of aid to become a platform for trust-building and improved collaboration between North and South beyond the aid agenda alone.

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Annex

Party	Justification of Additionality
Australia	"Australia's fast-start finance … is new and additional, being drawn from a growing aid budget, and is not displacing funding from existing Australian aid programs" (UNFCCC 2012).
Austria	Not specified.
Belgium	"The contribution of the Belgium Development Cooperation for fast start finance in 2010, comes out of the rising ODA budget and covers only commitments taken after Copenhagen" (Belgian Development Cooperation 2010).
Canada	"Canada's fast-start financing is new and additional to other climate change financing committed prior to Canada's association with the Copenhagen Accord." (UNFCCC 2012).
Denmark	Any financing above target of .7% of GNI is additional (WRI 2011).
European Commission	"The European Commission's fast start funding comes on top of preliminarily programmed support for climate-relevant actions in developing countries in the period 2010-12 in the order of €900 million" (European Union 2011).
Finland	"The Finnish Government has decided to implement its commitment through the net increase of Finnish climate funding in 2010-12 compared to year 2009, which will be used as baseline… The net increase of climate funding will be a part of the overall increase of Finnish ODA in the years 2010-12. Finland remains committed to reaching the 0.7% target of its GNP for ODA." (Government of Finland 2011).
France	"France has consistently increased its commitment in recent years, reaching a total of €2.4 billion in 2009 for both mitigation and adaptation, i.e. an almost two-fold increase on 2008 (+93%)" (Government of France 2011).
Germany	Money is additional to 2009 budget and comes from innovative sources (Government of Germany 2011; WRI 2011).
Iceland	"The contribution is new and additional to current ODA, and for this reason a separate item has been included on environmental and climate change matters in international development cooperation in the State budget as of 2012." (UNFCCC 2012).
Ireland	Not specified.
Italy	Not specified.
Japan	Not specified; Funding is from the "Hatoyama Initiative" announced in December 2009 (UNFCCC 2012).
Liechten-stein	"These CHF 700'000 are additional to Liechtenstein's climate financing and Official Development Aid of the previous years." (UNFCCC 2011)
Luxembourg	"This funding is additional to the existing ODA of 1.0% of GNI." (Government of Luxembourg 2011).
Malta	Not specified
Netherlands	"This funding is new and additional to the ODA percentage of 0.8% of GDP" (Government of the Netherlands 2011).

New Zealand	"Progress against our fast-start commitment is being met from within additional increases in the aid budget. Our fast-start is therefore not diverting from other important development priorities, but instead will complement and further strengthen these." (UNFCCC 2011).
Norway	"Norwegian total Official Development Aid (ODA) has for a long time exceeded 0.7% of Gross National Income (GNI). All our climate finance can be counted beyond the 0.7% threshold. Moreover, we have steadily increased our Official Development Aid budget… 2008 is used as the base year since climate finance traditionally has been an integral part of Norwegian Official Development Aid (ODA), and exact figures from before 2008 are not available." (Government of Norway 2011).
Portugal	Not specified
Slovenia	Not specified
Spain	Does not include commitments made before the fast-start commitment in December 2009 (WRI 2011)
Sweden	"Sweden's most recent additional budget allocation for this purpose is a specific Climate package of approximately €405 million for a four year period until 2012. Official development assistance (ODA) is provided at 1% of GNI or approximately €3 billion in 2010… Climate related activities form a substantial part of this funding" (Government of Sweden 2011).
Switzerland	"These CHF 140 million are additional to Swiss climate financing and Official Development Assistance of previous years…new and additional amount is to be added to existing bilateral cooperation budgets." (Government of Switzerland 2011).
United Kingdom	"Climate finance is being met out of rising ODA from 2011/12 to 2014/15 and will reach only 7.5% of UK ODA by 2014/15, therefore within the 10% proposed by the previous Government." (Government of the United Kingdom 2011)
United States	"A fourfold increase in annual appropriated climate assistance since 2009" (US Department of State 2012).

Table 3: Justifications of Additionality of Fast Start Finance´